### Annual Conference on Fire Related Research and Developments (RE19)*

**Wednesday 13th November 2019**

West Midlands Fire Service HQ, Birmingham

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<tr>
<td>8.30am</td>
<td>Registration and coffee</td>
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<tr>
<td>9.15a.m</td>
<td>Welcome and Introduction</td>
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| 9.30-10.30am  | **Dynamics of Fire and Fire Behaviour**

**Room 2**  
Chair: Dr Emma Dean

- J Gall (West Yorkshire Fire and Rescue Service): Regent Quay - Fire spread to upper floors of a residential flats building through the smoke ventilation shaft system supported by fire modelling

- A Nyombi, M Williams, R Wessling (Cranfield University): Toxic carbon monoxide emissions from combustion of coal, charcoal and wood sawdust with a case study of emission build-up in an ISO container

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| 9.30-10.30am  | **Understanding the Physical Health and Wellbeing of Firefighters**

**Room 1**  
Chair: Dr Sally Andrews

- B Highlands, M Matthews, S Pearson (University of Salford and GMFRS): A feasibility report on the use of an heart rate algorithm estimation method to determine core body temperature in firefighters

- J Billings (Embry-Riddle Aeronautical University): 24/48 vs 48/96: The relationship between sleep quality and circadian dysrhythmia
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<tr>
<td>10.30-11.00am</td>
<td>Coffee/poster displays</td>
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<td>11.00-12.30pm</td>
<td>Parallel sessions</td>
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**Community Safety and Prevention Activities**

**Room 1**

**Chair:** Dr Sally Andrews

- **J Clarke** (Edgehill University): The inclusion of an atrial fibrillation check in FRS Safe and Well visits
- **G Reinhardt, A MacAlister, K Moir** (University of Essex and Essex Fire and Rescue Service): How Safe and Well is your Prevention Activity? A study in impact and effectiveness
- **K Sambrooks** (University of Kent and Kent and Medway NHS and Social Care Partnership Trust): Meta-Analysis of Adult and Juvenile Firesetting Recidivism to Establish the Untreated Base Rate for Reoffending in Deliberate Firesetting

**Fire Engineering and Infrastructure Safety**

**Room 2**

**Chair:** Dr Peter Wilkinson

- **J Gall** (West Yorkshire Fire and Rescue Service): Fire modelling research of the efficiency of natural smoke shaft systems to protect single staircase residential buildings during firefighting operations
- **J Baker** (University of Edinburgh): Post-Construction Fire Safety: Did we shut the door before the horse had bolted?
- **B Bulut** (Yüksel Proje): Extending Cross-Passage Spacing along Metro Tunnels – a Performance-Based Analysis

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<td>12.30-13.30pm</td>
<td>Lunch/networking/poster displays</td>
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<td>Parallel sessions</td>
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<td>14.30-15.00pm</td>
<td>Tea/poster displays</td>
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**Managing Risk in the Community**

**Room 1**

Chair: Dr Sally Andrews

G Holland (ORH Consultants): Do Response Times Still Matter?

P Murphy and K Lakoma (Nottingham Trent University): A review of Integrated Risk Management Plans in Fire and Rescue Services

**Fire Professionals' Impact on the Community**

**Room 2**

Chair: Dr Emma Dean

F Long (Hampshire Fire and Rescue Service and Imperial College London): The Impact of Fire and Rescue Service First Responders on Participant Behaviour during Chemical, Biological, Radiological and Nuclear (CBRN)/Hazmat Incidents in the UK

J Foster (University of Cambridge): An Exploratory Study of How Practitioners in UK Fire and Rescue Services Working with Children and Young People who Set Fires Identify Clients Requiring Psycho-Social Interventions
15.00-16.30pm  Parallel sessions

**Improving Fire and Rescue Services’ Operational and Organisational Learning**
Room 1
Chair: Dr Peter Wilkinson

D Holdsworth (South Wales Fire and Rescue Service): A Picture Paints a Thousand Words: Complex data interpretation and organisational learning in the UK Fire & Rescue Service

A Brown (Coventry University): Mindsets at Work: Are Firefighters Prepared to Learn from Mistakes?

C Storey, C Brennan and S Waring (University of Liverpool): Do decision logs improve a firefighters’ memories?

**Governance and Regulation in the UK Fire and Rescue Service**
Room 2
Chair: Dr Emma Dean

R Ashworth and C Farrell (Cardiff University): Leadership and Good governance in UK Fire and Rescue Services: Comparing models and reviewing practices

P Murphy, R Glennon, P Eckersley, K Lakoma, K Greenhalgh, A Toothill (Nottingham Trent University and University of Nottingham): Evaluating HMICFRS, the inspection framework and the first round of inspections

P Murphy, R Glennon, P Eckersley, K Lakoma, K Greenhalgh, A Toothill (Nottingham Trent University and University of Nottingham): Improving policy, service delivery and public assurance in Fire and Rescue Services.

16.30pm  Final comments, evaluation and depart

**Poster Presentations and Displays**

C Spoons (Walden University): Evaluating the Relationship Between the Use of Unapproved Fuels in Live-Fire Training and Carcinogen Exposure.

R Carvel (University of Edinburgh): Backdraught (and how to avoid it).

*Please Note: These are draft details and may change. Any programme changes will be posted at: [www.ife.org.uk/events](http://www.ife.org.uk/events)*